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Shlomo Shkolnik

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EXAMINER

PROCTOR, JASON SCOTT

ART UNIT

PAPER NUMBER

2123

DATE MAILED: 09/13/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/914,487

Applicant(s)

SHKOLNIK, SHLOMO

Examiner

Jason Proctor

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 June 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 23-78 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 23-78 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 20 June 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- 1) ☐ Certified copies of the priority documents have been received.
 - 2) ☐ Certified copies of the priority documents have been received in Application No. _____.
 - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 10/28/2004
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

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DETAILED ACTION

Claims 1-52 were presented for examination and rejected in Office Action mailed 3 November 2004. Applicants have cancelled claims 1-22; amended claims 23-26, 31, 32, 34, 38-39, 41, 45, and 47; and added new claims 53-78 in response dated 3 March 2005. This amendment was made fully compliant with 37 CFR 1.121 in subsequent response filed on 20 June 2005. Claims 23-77 have been submitted for reconsideration.

Claims 23-77 have been rejected.

Drawings

The Examiner thanks Applicants for addressing the previous objections to the drawings. Regarding the objection for reference 54, the Examiner apologizes for confusing the amendments to the specification. Applicants are correct that no amendment has deleted the paragraph on page 10, lines 16-21, which explain reference 54.

The previous objections to the drawings have been withdrawn.

Specification

The Examiner thanks Applicants for addressing the previous objections to the specification. Those objections have been withdrawn.

1. The amendment filed 3 March 2005 is objected to under 35 U.S.C. § 132(a) because it introduces new matter into the disclosure. 35 U.S.C. 132(a) states that no amendment shall

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introduce new matter into the disclosure of the invention. The added material which is not supported by the original disclosure is as follows: "an input interface" as recited by claim 77.

2. The amendment filed 3 March 2005 is objected to under 35 U.S.C. 132(a) because it introduces new matter into the disclosure. 35 U.S.C. 132(a) states that no amendment shall introduce new matter into the disclosure of the invention. The added material which is not supported by the original disclosure is as follows: "selecting [less than 10%, less than 1%, fewer than all] of the physical elements of the vehicle" as recited in at least claims 32, 45, 72. The disclose, as filed, provides no description of this selection or how it is performed. The claims do recite, for example, "selecting fewer than all of the physical elements of the vehicle", however the term "physical elements of the vehicle" fails to comply with 35 U.S.C. § 112, second paragraph, as set forth below. Therefore, the claimed step of "selecting" these ambiguously defined elements was not disclosed in the application as filed.

Applicant is required to cancel the new matter in the reply to this Office Action.

Rejections under 35 U.S.C. § 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

3. Claims 45-49 and 78 are rejected under 35 U.S.C. § 101 because the claimed invention is directed to non-statutory subject matter. Claims 45-49 recite a method of labeling major elements of an aircraft where the broadest reasonable interpretation of the claims includes a method executed by a human. These claims are not directed to a technology art and therefore nonstatutory.

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As per Applicants' request for clarification of the Examiner's interpretation of these claims, please see MPEP 2111:

The process comprised selecting the data to be analyzed by subjecting the data to a mathematical manipulation. The examiner made rejections under 35 U.S.C. 101 and 102. In the 35 U.S.C. 102 rejection, the examiner explained that the claim was anticipated by a mental process augmented by pencil and paper markings. The court agreed that the claim was not limited to using a machine to carry out the process since the claim did not explicitly set forth the machine. The court explained that "reading a claim in light of the specification, to thereby interpret limitations explicitly recited in the claim, is a quite different thing from reading limitations of the specification into a claim, to thereby narrow the scope of the claim by implicitly adding disclosed limitations which have no express basis in the claim." The court found that applicant was advocating the latter, i.e., the impermissible importation of subject matter from the specification into the claim.). See also *In re Morris*, 127 F.3d 1048, 1054-55, 44 USPQ2d 1023, 1027-28 (Fed. Cir. 1997)

Also see MPEP 2106(II)(A):

A process that consists solely of the manipulation of an abstract idea is not concrete or tangible. See *In re Warmerdam*, 33 F.3d 1354, 1360, 31 USPQ2d 1754, 1759 (Fed. Cir. 1994). See also *Schrader*, 22 F.3d at 295, 30 USPQ2d at 1459.

The method of claim 45 includes steps of "selecting", "determining", and "assigning". In preparation of this Office Action, the Examiner has selected "wings" to be major elements that represent the vehicle, determining that the wings belong to the "structural system", and assigning them the codes "structural wing 1" and "structural wing 2" which are unique to each occurrence of the element in the aircraft and responsive to the system in which the element belongs. If claim 45 were regarded as patentable, the Examiner's mental process would infringe on the claim. The Examiner respectfully reiterates the recommendation to limit the interpretation of these claims to the technological arts, as has been done with claim 23.

Claims rejected but not specifically mentioned stand rejected by virtue of their dependence.

To expedite a complete examination of the instant application the claims rejected under 35 U.S.C. § 101 (nonstatutory) above are further rejected as set forth below in anticipation of applicant amending these claims to place them within the four statutory categories of invention.

Regarding the rejection of claims 23-28 and 30-31 as being directed to nonstatutory subject matter, the Examiner thanks Applicants for amending these claims so that their broadest reasonable interpretation is limited to the technological arts. The previous rejection of those claims has been withdrawn.

Rejections under 35 U.S.C. § 112, first paragraph

In response to the rejection of claim 44 under 35 U.S.C. § 112, first paragraph, as failing to comply with the enablement requirement, Applicants' response states that:

Claim 44 does not impose any limitations on the structure of the aircraft which would require a change in the structure of the aircraft and prevent enablement.

Applicants' argument that a conventional aircraft as known in the art would be enabled has been fully considered and has been found persuasive. The previous rejections under 35 U.S.C. § 112, first paragraph, have been withdrawn.

4. Claims 32-49, 53-74, and 78 are rejected under 35 U.S.C. § 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. Independent claims 32, 45, and 72 recite steps of "selecting" a portion of "the physical elements of the vehicle". As set forth below, the phrase "physical elements of the vehicle" is indefinite and fails to comply with 35 U.S.C. § 112, second paragraph. Further, Applicants' have not disclosed how the act of "selecting" is performed or on what criteria. This results in an abstract,

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undefined act of “selecting” a certain portion of ambiguously defined “physical elements” of a vehicle. This could comprise selecting the vehicle’s moving parts, selecting the top ten most expensive components, selecting the electrical system, or selecting a list of raw materials that contribute to the car’s structure. A person of ordinary skill in the art would be unable to make and use Applicants’ invention because of these several levels of ambiguity in the disclosure and claims.

Claims rejected but not specifically mentioned stand rejected by virtue of their dependency.

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

5. Claim 77 is rejected under 35 U.S.C. § 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. New independent claim 77 recites limitations regarding “an input interface for receiving data from a plurality of computerized tools” which is regarded as new matter. A search of the specification, as originally filed, fails to provide adequate written support for this limitation. Applicants are required to either cite specific support for this language or to cancel the limitation.

Rejections under 35 U.S.C. § 112, second paragraph

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Regarding the rejections of claims 23-26, 32, 33, 38, and 45-47 under 35 U.S.C. § 112, second paragraph, as being vague and indefinite for their use of the term "major element", Applicants have amended the claims to include an act of "selecting major elements". Therefore, in the context of the claims, a "major element" is one that has been selected. The corresponding rejection under 35 U.S.C. § 112, second paragraph, has been withdrawn.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. Claims 27, 28 and 47 are rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claim 27, the term "substantially" is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention. It is unknown to the examiner what portion of workers constitutes "substantially any of the workers". It is unknown how to determine whether a group of workers of a company constitutes "substantially any of the workers", or if a single worker is "substantially any of the workers".

Regarding claim 47, the term "at least most of the major elements" is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention. The inclusion of the term "at least" in relation to "most of the major elements" implies something in addition to a simple majority; in other words, "most of the major elements" could be interpreted

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as "51% of the major elements". The phrase "at least most of the major elements" implies "51% of the major elements in addition to minor elements." The clear meaning of this limitation, however, appears to contradict Applicants' arguments that the invention does not consider all of the elements of the aircraft. Clarification is required.

Claims rejected but not specifically mentioned stand rejected by virtue of their dependence.

7. Regarding the rejections of claims 23, 27, and 47 under 35 U.S.C. § 112, second paragraph, as being vague and indefinite for their use of the term "substantially", Applicants' argue that:

The use of the term substantially in the context used in claims 23, 27 and 47 is permissible as evident from MPEP 2173.05(b). [The term 'substantially' has been removed from claim 23, and 'substantially' has been replaced with 'most' in claim 47.]

[Regarding claim 27,] Applicant respectfully submits that any person of the art would be able to determine whether information is not restricted from viewing by substantially any of the workers of a company. While application cannot provide specific numbers, it is easily determined for a given situation whether a limited number of workers (e.g., workers associated with competing companies) break the rule that substantially all workers can view the database or they are an exception which does not break the rule.

The Examiner thanks Applicants for addressing the indefiniteness of claim 23. The Examiner respectfully traverses this argument as follows.

Applicants' arguments illustrate the indefiniteness of claim 27. The Examiner respectfully submits that where Applicant cannot provide specific numbers, the Examiner cannot ascertain whether the prior art teaches the limitation, and were the claim to issue as a patent, it would be impossible to determine what does or does not infringe the claim. It remains unknown how to regard the examples given in the previous Office Action, specifically whether a group of

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workers constitutes “substantially any of the workers” or if a single worker is “substantially any of the workers”. Applicants’ response does not shed light on this indefiniteness.

8. Claims 59 and 72-74 are rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claims 59, 72, and 74, these claims recite “selecting less than 10% [1%] of the physical elements of the vehicle”. This phrase has been rejected previously in claims 11 and 12 because the term “physical elements of the vehicle” is not defined by the claims or specification. It remains indefinite whether “physical elements of the vehicle” comprises components such as nuts, bolts, and washers, whether it comprises large combinations of components such as wings and landing gear, whether it comprises both, and if so, whether a component could be selected twice (as in the case where “bolts” and “landing gear” are selected, thereby including bolts in the landing gear at least twice.) In order to avoid speculative assumption, the Examiner interprets this limitation as “selecting some of the physical components of the vehicle”, an interpretation so broad that it remains unclear what would be excluded by it.

Claims rejected but not specifically mentioned stand rejected by virtue of their dependence.

In response to the previous rejection, Applicants’ argued primarily that:

Applicant respectfully submits that even if the term was indefinite in database claims 11-12, in method claims 59, 72 and 74 the term is definite. Nonetheless, applicant added the word physical to the claims, as suggested by the Examiner.

The Examiner respectfully traverses this argument as follows.

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The Examiner is aware of no suggestion to write the claim as it appears. Applicants' amendments do not overcome the basis for the rejections, as set forth above. Applicants' arguments have been fully considered, but have been found unpersuasive.

Regarding the previous rejections of claims 17 (rewritten as claim 64), 23, 31, and 41 under 35 U.S.C. § 112, second paragraph, the Examiner thanks Applicant for amending the claims to overcome these rejections. The previous rejections of claims 17, 23, and 31 under 35 U.S.C. § 112, second paragraph, have been withdrawn.

9. Claim 66 is rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

It is unknown whether "incorporating [information] into a form of the database" should be interpreted as "storing [information] in the database". In general, it is unclear what is meant by "incorporating into a form of the database". The phrase "a form of the database" appears to refer to an abstract concept of a database or one of several versions of a database. Clarification is required.

Regarding the previous rejection of claim 20, which has been rewritten as claim 66, the Examiner is aware of no suggestion to write the claim as it appears.

Regarding the previous rejection of claim 50 for using the term "configuration management codes", the Examiner capitulates that the term is merely broad, not indefinite.

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However, as the specification fails to precisely define what is meant by "configuration management codes"; it is unclear what would be properly excluded by the limitation. Applicants would have difficulty in persuasively arguing that the prior art fails to disclose such a limitation. The previous rejection of claim 50 under 35 U.S.C. § 112, second paragraph, has been withdrawn.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

10. Claims 23-25, 31, 72, 74, 76 and 77 are rejected under 35 U.S.C. § 102(b) as being anticipated by US Patent No. 5,646,862 to Jolliffe (Jolliffe).

Regarding claim 23, Jolliffe discloses a vehicle design index (column 1, lines 6-10; column 2, lines 23-53), comprising:

gathering by a computer from a plurality of computerized tools, information on physical components of a vehicle ["*central repository to store all design, analysis and library information*", (column 3, lines 7-20); "*CAE tools include, by way of example, wiring CAD 18, schematic capture 20, etc.*" (column 4, lines 10-23)];

wherein the gathering includes retrieving from at least one of the computerized tools fewer than all the elements of the vehicle described by the tool

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[*“Common data in the design is stored once, and updated as needed by the different CAE tools 18-40.”* (column 4, lines 28-33) Note that data is updated *as needed*.]; and

storing the information in the index (column 4, lines 24-34).

In response to this rejection, Applicants’ argue primarily that:

Claim 23 was amended to require gathering from at least one of the tools fewer than all the elements described by the tool. This amendment broadens the claim, as it does not require the collection of information on “all the major elements”.

The translators of Jolliffe, in contrast, relate to the entire internal data structures (col. 2, lines 54-56) and “must accurately support the data by providing a superset of all data required” (col 4, lines 34-39).

The Examiner respectfully traverses this argument as follows.

The portions of Jolliffe cited by Applicant are not germane to Applicants’ argument. To demonstrate, Jolliffe states (column 4, lines 34-39, emphasis added):

To support vendor independence, the data model of FIG. 1 is built from industry standards where available. Where the standards are not available for the vehicle design, the model must accurately support the data by providing a superset of all data required, and provide for that non-standard data’s mapping to standard formats.

How Jolliffe copes with the situation where standards are not available is irrelevant as Applicants do not claim to have invented a method of coping with that situation. Applicants’ do claim a method of storing data in a database, which Jolliffe anticipates.

Further, Jolliffe discloses collecting the information from a variety of CAE tools. The process is described at column 8, lines 38-50:

For example, given a neutral file reference and a subsystem reference, the first task is to read and/or parse the neutral file format. Picking the pertinent pieces of information from the file, the translator manipulates that information back to the VDB format.

Jolliffe also discloses an example where a wiring harness is to be stored in the VDB; however there is no “wiring harness” representation in the VDB format:

FIG. 10 depicts a complex manipulation, converting wire harness connectivity information into EDIF format. [...] Harnesses (having wires, connectors, and splices) are not naturally represented in EDIF.

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Therefore, a decision must be made as to which EDIF data elements the harness elements should be mapped.

The result is a CAE tool which stores information for a wiring harness that is not represented in the vehicle design index.

Further, Applicants arguments allege that the system of Jolliffe store all elements for all the CAE tools at all times (else some elements would be excluded), an allegation about which the Examiner is extremely skeptical. For example, Jolliffe discloses (column 6, lines 49-59):

In operation, the user similarly initializes the inbound translation via VDB integration menu buttons of the tool [...]

In light of this and other portions of Jolliffe fail to rise to the level necessary to credibly substantiate Applicants' allegation that Jolliffe stores all elements for all CAE tools at all times. If a user is required to import some of the data into the VDB, then implicitly disclosed is the user's decision not to import certain data from a given CAE tool.

Applicants' arguments have been fully considered but have been found unpersuasive.

Regarding claim 24, Jolliffe discloses that gathering information comprises gathering location information for the physical components (column 10, lines 1-14).

Regarding claim 25, Jolliffe discloses that gathering information comprises gathering interconnection information of the physical components (column 5, lines 8-21).

Regarding claim 31, Jolliffe discloses gathering the information periodically (column 4, lines 28-34).

Regarding claim 76, Jolliffe discloses collecting data on both electrical and mechanical elements ["*Still further, engine loading tool 28 allows the user to study the relationship between the electrical system and the mechanical system.*" (column 5, lines 8-21)].

Regarding claims 72 and 74, the claim limitations have been rejected as being vague and indefinite. The only reasonable interpretation the Examiner can provide for claim 72 is that it recites a method according to claim 23 and an additional step of searching the database. Therefore, in light of Joliffe's disclosed searchable database (column 7, lines 39-48), claim 72 is rejected for the same reasons given above for claim 23.

Regarding claim 77, Jolliffe discloses a computer implemented method (abstract) and therefore implicitly discloses the use of a memory and an input interface. The other limitations of claim 76 are addressed above in the context of claim 23.

11. Claims 50-52 are rejected under 35 U.S.C. § 102(b) as being anticipated by US Patent No. 5,634,055 to Barnewall et al. (Barnewall).

Regarding claim 50, Barnewall teaches a method of referencing workers working on an aircraft (column 2, line 64 – column 3, lines 13) comprising:

assigning identification codes to various aspects of the aircraft (column 2, line 64 – column 3, lines 13);

assigning a part number code which includes the assigned configuration management code of the aspect to which the part belongs (column 2, line 64 – column 3, lines 13); and

assigning worker codes which include the identification code of the aspect on which the worker works (column 2, line 64 – column 3, lines 13).

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In response, Applicants argue primarily that:

Claim 50 requires assigning each part of an aircraft, a part number code which includes an assigned configuration management code of an aspect to which the part belongs and assigning worker codes which include the configuration management code of the aspect on which the worker works.

Barnewall does not relate to assigning part number codes, but rather to assigning IDs to trips of aircrafts. The codes in Fig. 3 of Barnewall are flight number codes. Barnewall does not assign worker codes at all.

The Examiner respectfully traverses this argument as follows.

The Examiner has previously identified the ambiguity of Applicants' claim language. The Examiner respectfully submits that flight attendants are indeed "workers working on an aircraft". Barnewall clearly discloses that a flight has several "legs", or parts, which are grouped into "days of flying" which are subsequently paired into an "ID". As clearly disclosed by Barnewall, these part numbers, referred to as "IDs", represent a single trip that a pilot or flight attendant (a worker working on an aircraft) might make. Assigning a pilot or a flight attendant to an ID at least implicitly requires assigning some representation of the pilot or flight attendant, thus a "worker code".

Applicants' arguments have been fully considered, but have been found unpersuasive.

Regarding claim 51, Barnewall et al. teaches that the identification codes comprise three digits (Figure 3, reference 21).

Regarding claim 52, Barnewall et al. teaches preparing a responsibility matrix which references workers by the assigned worker codes (column 2, line 64 – column 3, lines 24).

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Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35

U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

12. Claims 26-27 and 29 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Jolliffe as applied to claim 23 above, in view of US Patent No. 6,314,422 to Barker et al. (Barker).

Regarding claim 26, Jolliffe does not expressly disclose gathering references to documents describing the physical components.

Barker teaches linking between information relating to vehicle wiring, parts, and manuals using hyperlinks (column 3, line 39 – column 4, line 9; column 7, line 27-42). It would have been obvious to a person of ordinary skill in the art at the time of applicant's invention to combine the document linking mechanism of Barker with the vehicle design index of Jolliffe in order to make use of commercial, off-the-shelf technology when providing information relating to the system under design. The combination could be achieved by storing the link in the

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database of Jolliffe (column 2, lines 36-40) and delivering it to the user when translating data to and from the database (column 5, line 56 – column 6, line 3).

In response, Applicants argue primarily that:

Barker suggests linking the documents to each other. Barker does not teach or suggest gathering references to documents into an index and is not related at all to storing such an index. Thus, neither of Jolliffe or Barker teaches or suggests gathering references to documents or including such references in an index. Absent this requirement, the combination of Jolliffe and Barker does not establish a *prima facie* case of obviousness, regarding claim 26.

The Examiner respectfully traverses this argument as follows.

Applicants' argument appears to ignore the combination formed in the previous rejection under 35 U.S.C. § 103. Jolliffe discloses storing an index of vehicle components but does not expressly disclose gathering references to documents describing the components. Barker teaches linking documents that describe vehicle components. The previous rejection clearly conveys the combination of Barker's teachings regarding storing the documents with the index of vehicle components disclosed by Jolliffe, which combination renders claim 26 unpatentable under 35 U.S.C. § 103.

Applicants' arguments have been fully considered but have been found unpersuasive.

Regarding claim 27, neither Jolliffe nor Barker et al. expressly disclose that at least one group of workers are restricted from viewing at least some information and wherein gathering information comprises gathering information which is not restricted from viewing by any of the workers of the company. However, it would have been obvious to a person of ordinary skill in the art at the time of applicant's invention in combination with his own knowledge of the particular art to design a vehicle design index comprising information which is not restricted from viewing by any of the workers of the company. A vehicle design index which provides no

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means of restricting access to information yet contains information which is restricted from viewing by some workers would undermine the restricted nature of the information, therefore it would have been obvious to gather only the information which is not restricted from viewing by any of the workers.

In response, Applicants argue primarily that:

Claim 27, for example, requires gathering information which is not restricted from viewing by substantially any of the workers of the company. [...] In fact, as discussed above, Barker and Jolliffe relate to fullscale systems which include all the available information. Therefore, there is no reason to assume that Barker and Jolliffe would leave out restricted information or any other information. Furthermore, neither of Barker and Jolliffe has suggested an open index which can be viewed by substantially all workers of a company. The Examiner, therefore, has not established a *prima facie* case of obviousness regarding claim 27.

The Examiner respectfully traverses this argument as follows.

Applicants' argument is unpersuasive for at least the rejections of claim 27 under 35 U.S.C. § 112, second paragraph, relying on the language "substantially any of the workers".

Jolliffe explicitly discloses no security features in the database. Therefore, Applicants' argument that "there is no reason to assume that Barker and Jolliffe would leave out restricted information" is unpersuasive. It is unreasonable to believe that Jolliffe would store restricted information in a database with no security features.

Applicants' allegation that "neither Barker and Jolliffe has suggested an open index which can be viewed by substantially all workers of a company" is unpersuasive because that appears to be precisely what Jolliffe discloses. Applicants have failed to show where Jolliffe excludes access to the vehicle database for some portions of the users.

Applicants' arguments have been fully considered, but have been found unpersuasive.

Regarding claim 29, Jolliffe teaches storing the information in a database (abstract).

13. Claim 28 is rejected under 35 U.S.C. § 103(a) as being unpatentable over Jolliffe in view of Barker as applied to claim 27 above, and further in view of US Patent No. 5,008,853 to Bly et al. (Bly).

Regarding claim 28, neither Jolliffe nor Barker expressly disclose gathering information from tools which carry information restricted from viewing by at least one group of workers within the company designing the vehicle.

Bly teaches a multi-user collaborative system where at least some information is restricted from viewing by at least one group of workers (abstract). It would have been obvious to a person of ordinary skill in the art at the time of applicant's invention to include the access restriction feature of Bly when designing a vehicle design index to facilitate the inclusion of information restricted from viewing by at least one group of workers by embracing the viewing restrictions within the vehicle design index itself. The combination could be achieved by means of user authentication and providing requested information only when the authenticated user is not restricted from viewing the requested information.

Claim 75 is rejected under 35 U.S.C. § 103(a) as being unpatentable over Jolliffe as applied to claim 23 above in view of Bly.

Claim 75 recites basic database permissions. Bly discloses basic database permissions (abstract). It would have been obvious at the time of Applicants' invention to combine basic database permissions taught by Bly with the vehicle design index taught by Jolliffe to protect sensitive data, ostensibly necessary to protect sensitive design information in a large corporation.

Claim 30 is rejected under 35 U.S.C. § 103(a) as being unpatentable over Jolliffe as applied to claim 23 above.

Regarding claim 30, while Jolliffe does not expressly disclose gathering information on physical components of an aircraft, Jolliffe does teach gathering information on physical components of a vehicle (column 2, lines 23-40). It would have been obvious to a person of ordinary skill in the art at the time of applicant's invention in combination with his own knowledge of the particular art to use the invention of Jolliffe for the intended use of aircraft design.

Regarding the rejection of claims 32-40 and 42-44 under 35 U.S.C. § 103(a) as being unpatentable over Jolliffe in view of US Patent No. 6,438,535 to Benjamin (Benjamin) and further in view of US Patent No. 5,806,069 to Wakiyama et al. (Wakiyama), the Examiner has fully considered Applicants' arguments and finds them persuasive in regard to Wakiyama. Those rejections have been withdrawn.

14. Claims 32-40, 43-44, 53, 55-59, and 61-71 are rejected under 35 U.S.C. § 103(a) as being unpatentable over US Patent No. 5646862 to Jolliffe (Jolliffe) in view of US Patent No. 6,438,535 to Benjamin (Benjamin) and further in view of US Patent No. 4,885,694 to Pray et al. (Pray).

Regarding claim 32, Jolliffe teaches a method of providing information between workers designing a vehicle (claim 2, lines 23-53) comprising:

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storing the gathered information in a database (column 2, lines 23-53);

searching the database for information on one of more of the physical components (column 2, lines 23-53); and

selecting the components to store in the database (column 6, lines 49-59).

Notwithstanding Jolliffe's disclosure, selecting the components to store in the database is an inherent step in storing the components because data cannot be stored in the database if it is not first somehow selected to be stored.

Jolliffe does not expressly teach gathering information regarding the physical components including a plurality of different indications of the relative assembly of the component and a plurality of references to workers in charge of the component.

Benjamin teaches gathering information including a plurality of different indications of the relative assembly of the components (column 3, lines 21-45).

It would have been obvious to a person of ordinary skill in the art at the time of Applicants' invention to take the teachings of Jolliffe in combination with Benjamin in order to store and provide information including a plurality of indications of the relative assembly of the physical components in order to provide a higher level of detail in the information stored and provided to workers. The combination could be achieved by storing the additional data in the database necessary to indicate the relative assembly of the component.

Pray teaches a design automation system (abstract) wherein job or proposal information records the name of the engineer assigned to the project (column 16, lines 46-64) for bookkeeping purposes.

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It would have been obvious to a person of ordinary skill in the art at the time of Applicants' invention to take the teachings of Pray in combination with Jolliffe in view of Benjamin in order to store the name of the worker in charge of an assembly for bookkeeping purposes. The combination could be achieved as described by Pray (column 16, lines 46-64), by recording the responsible engineer's name with the project or assembly, and tracking labor spent on the project or assembly as correlated with the engineer's work schedule.

Regarding claim 33, Jolliffe does not disclose gathering references to documents related to the physical components, however Benjamin does teach gathering references to documents related to the physical components (column 22, "TABLE XXXIII"). It would have been obvious to a person of ordinary skill in the art at the time of applicant's invention to take the teachings of Jolliffe in combination with Benjamin in order to store references to documents related to the physical components in order to provide a higher level of detail in the information stored and provided to workers. The combination could be achieved by storing the additional data in the database necessary to indicate the documents related the component.

Regarding claim 34, Benjamin teaches that the plurality of different indications of the relative assembly of the element comprises at least one indication of the location of the element (column 3, lines 20-45). The combination is the same as that used to reject claim 32.

Regarding claims 35-37, none of Jolliffe, Benjamin, or Pray expressly discloses storing at least one indication of the location of a component which comprises coordinates, an access door,

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or a compartment. However, Benjamin does teach that the parts are assigned pre-defined locations in the final assembly (column 3, lines 22-45). It would have been obvious to a person of ordinary skill in the art at the time of applicant's invention to combine the teachings of Benjamin in combination with his own knowledge of the particular art to further specify "pre-defined locations within the final assembly" as corresponding to coordinates, an access door, or a compartment in which the part is located to meet the intended use of the finished invention. The combination could have been accomplished by appropriately changing the data type of the pre-defined location in the database of Jolliffe.

Regarding claim 38, Jolliffe teaches gathering information related to physical components to which the component is connected (column 5, lines 8-21). The combination is the same as that used to reject claim 32.

Regarding claims 39 and 40, Jolliffe teaches gathering information related to the system to which the physical component belongs as well as the function which the physical component performs (column 5, lines 8-21).

Regarding claim 43, Jolliffe does not expressly disclose whether the database contains diagrams or drawings, however the omission of an element and its function is obvious if the function or element is not desired. Applicant admits that a feature of the instant invention is the omission of drawings and diagrams which require large amounts of storage and of little interest to workers not in the department in charge of the element described by the drawings (page 3, lines 10-17). Therefore, it would have been obvious to a person of ordinary skill in the art at the

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time of applicant's invention to omit the drawings and their function, as neither is desired. See *In re Kuhle*, 526 F.2d 553, 188 USPQ 7 (CCPA 1975).

Claim 44 is a product-by-process claim for admitted prior art. See MPEP 2113 and Applicants' response 3 March 2005, page 11, which states:

The design of aircrafts is known in the art and is therefore enabled. Claim 44 does not impose any limitations on the structure of the aircraft which would require a change in the structure of the aircraft and prevent enablement.

As Applicants have admitted that the aircraft of claim 44 is at least identical to those of the prior art and the product-by-process nature of the claim merely requires "a product appearing to be substantially identical" to reject the claim, the Examiner respectfully submits that claim 44 is unpatentable in view of Applicants' admission.

Regarding claim 53, Benjamin teaches a database including at least one indication of the relative assembly of the physical components (column 2, line 66 – column 3, line 21).

Regarding claim 55, Pray discloses storing data for a variety of different tasks, such as labor scheduling, ordering materials, job billing, etc. (column 2, line 55 – column 3, line 22). It would have been obvious to a person of ordinary skill in the art that Pray therefore discloses storing information which is handled by personnel from a plurality of different departments. It would have been obvious to combine this feature with the invention of claim 32 to provide a database that supports additional features, such as billing functionality.

Regarding claim 56, Benjamin teaches records which comprise physical components which are functionally related to other components (column 2, line 66 – column 3, line 45).

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Regarding claims 57 and 58, none of the cited references expressly disclose a database limited to 1Gbytes or 100Mbytes of storage space. In *Gardner v. TEC Systems, Inc.*, 725 F.2d 1338, 220 USPQ 777 (Fed. Cir. 1984), *cert. denied*, 469 U.S. 830, 225 USPQ 232 (1984), the Federal Circuit held that, where the only difference between the prior art and the claims was a recitation of relative dimensions of the claimed device and a device having the claimed relative dimensions would not perform differently than the prior art device, the claimed device was not patentably distinct from the prior art device. Further, see *In re Lindberg*, 194 F.2d 732, 93 USPQ 23 (CCPA 1952), where it was held that making an invention of prior art portable does not distinguish it as patentably distinct over the prior art.

Regarding claim 59, none of the cited references expressly disclose a database including records for less than 10% or less than 1% of the components of a vehicle. However, as these claims are directed toward reducing the storage size of the database (page 3, lines 10-17; page 5, lines 16-20), they are therefore unpatentable over the prior art for the same reasons given for claims 9 and 10 above.

In response to the previous rejections of these limitations, Applicants' argue primarily that:

The generation of a database which only states major elements is a change in concept relative to the art and not a mere change in magnitude.

The Examiner respectfully traverses this argument as follows.

If Applicants' statement were persuasive, it would demonstrate that claims 57 and 58, which define the size of the database but depend from claim 32 which recites a database "having records only for the major elements", fail to particularly point out and define what Applicants' regard as their invention in light of Applicants' remarks. These claims would therefore be

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subject to a rejection under 35 U.S.C. § 112, second paragraph. However, Applicants arguments regarding the “change in concept” have been fully considered but have been found unpersuasive. Omitting irrelevant details from a database is not a new concept. Therefore, Applicants are respectfully encouraged to present claims that define the invention in concert with arguments presented on the record.

Applicants’ arguments have been fully considered but have been found unpersuasive.

Regarding claim 61, Benjamin teaches references to documents that contain diagrams including the components (Figures 6, 7; column 22, “TABLE XXXIII”).

Regarding claim 62, Benjamin teaches references that comprise procurement invoices (column 7, lines 59-63).

Regarding claim 63, Benjamin teaches that the components are identified by a unique code which is assigned according to a functionality of the component (column 3, lines 22-45).

Regarding claim 64, Jolliffe discloses a vehicle design system where various computerized tools update a central database (Figure 1; column 2, lines 23-40). The update of information can be performed automatically (column 4, lines 28-34).

Regarding claim 65, which recites a negative use limitation (only the computerized tools are used to change the content of the index), can be given no patentable weight. Further, none of the cited references disclose changing the index by means other than the computerized tools, and if they did, the limitation would be a matter of design choice or intended use.

Regarding claim 66, Jolliffe discloses a vehicle design system where various computerized tools insert information into a database (Figure 1; column 2, lines 23-40).

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Regarding claims 67 and 68, both design-to-cost programs and design-for-manufacture-and-assembly programs are known in the art (See "Teamset – a Concurrent Engineering Business Solution, the Manufacturing Toolset that Makes Teamwork a Reality", CSC, 1996). Further, Benjamin teaches the application of error prevention and detection on the data stored in the database (column 3, lines 46-62). Therefore, it would have been obvious to a person of ordinary skill in the art at the time of applicant's invention to use design programs known in the art combined with the error prevention and detection steps of Benjamin to arrive at applicant's claimed invention.

Regarding claim 69, the claim recites making the database portable which not a patentable limitation. See MPEP 2144.04 (V).

Regarding claim 70, the claim recites basic database permissions. Official Notice is taken that it is extremely well known in the art of databases to grant separate viewing and editing permissions to different groups of users.

Claim 71, which is a use claim, can be given no patentable weight. Therefore, as claim 32 is unpatentable over Jolliffe in view of Benjamin and further in view of Pray, so too is claim 71 unpatentable for the same reasons. Please see MPEP 2112.01. Applicants' are respectfully encouraged to cite evidence that the combination formed in the rejection of claim 32 would be unable to facilitate the use recited in claim 71.

15. Claim 60 is rejected under 35 U.S.C. § 103(a) as being unpatentable over Jolliffe in view of Benjamin and further in view of Pray as applied to claim 32 above, and further in view of US Patent No. 6,314,422 to Barker et al. (Barker).

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Regarding claim 60, none of the references cited in regard to claim 32 expressly disclose using a hyperlink to reference a document.

Barker teaches linking between information relating to vehicle wiring, parts, and manuals using hyperlinks (column 3, line 39 – column 4, line 9; column 7, line 27-42). It would have been obvious to a person of ordinary skill in the art at the time of applicant's invention to combine the document linking mechanism of Barker with the vehicle design index of Jolliffe in order to make use of commercial, off-the-shelf technology when providing information relating to the system under design.

16. Claims 54 is rejected under 35 U.S.C. § 103(a) as being unpatentable over US Patent No. 5646862 to Jolliffe (Jolliffe) in view of US Patent No. 6,438,535 to Benjamin (Benjamin), further in view of US Patent No. 4,885,694 to Pray et al. (Pray) as applied to claim 32 above, and further in view of US Patent No. 5,216,612 to Cornett et al. (Cornett).

Regarding claim 54, the references cite in the rejection of claim 32 do not expressly disclose the hierarchy of major elements being stored in the database.

Cornett discloses recording at least three levels of hierarchy for parts in a database [*"Preferably [the electronically stored parts manual] contains a complete bill of materials for each machine in each line. The bill of materials is contained in a hierarchial listing, which breaks each machine into assemblies and breaks each assembly into its subassemblies, down to the level of individual parts."* (column 3, lines 20-33)].

It would have been obvious to a person of ordinary skill in the art at the time of applicant's invention to combine hierarchical structure as taught by Cornett with the combination

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of Jolliffe, Benjamin, and Pray to produce a vehicle design index that depicts the relationship between components, so as to easily determine the impact of design changes. The combination could be achieved by using the hierarchical structure of Cornett to store the relationships between components within the combination of Jolliffe, Benjamin, and Pray according to a component's membership in a system.

17. Claims 45-48 and 78 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Benjamin in view of US Patent No. 5,216,612 to Cornett et al. (Cornett).

Regarding claims 45 and 46, Benjamin teaches a method of labeling physical components of an aircraft (column 24, lines 14-19), comprising determining a system to which each component belongs (column 3, lines 20-45).

Selecting elements to store in a database is inherently disclosed in reference to using a database. Data cannot be stored in a database without first being somehow selected.

Benjamin does not expressly disclose assigning each of the components a code which is unique to each occurrence of the component in the aircraft, responsive to the system in which the component belongs.

Cornett teaches a computer integrated maintenance system which includes a listing of parts in a plurality of machines (column 3, lines 20-33). Cornett teaches assigning a plurality of codes to a given part (column 5, lines 24-46).

It would have been obvious to a person of ordinary skill in the art at the time of applicant's invention to combine the plurality of codes for a given part as taught by Cornett with the labeling method of Benjamin to produce a labeling method that depicts a higher level of

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information regarding the component being labeled. The combination could be achieved by using the labeling method of Cornett to assign identifiers to components within the invention of Benjamin according to a component's membership in a system.

The limitations of claim 46 are rejected for the same reasons given for the rejection of claim 45.

In response, Applicants argue primarily that:

[T]he Examiner has not shown a reference that assigns codes to elements responsive to the system to which the element belongs, as required by claim 45. In addition, the Examiner has not shown assigning codes which are unique to each occurrence of the element in the aircraft. Furthermore, the Examiner has not explained why it would be obvious to utilize methods of assigning codes in computer systems, which are produced in a very innovative industry, to aircrafts, which are designed in a very conservative industry. In the aircraft industry, different departments use different tools in accordance with long standing traditions.

The Examiner respectfully traverses this argument as follows.

The Examiner has shown references teaching all of Applicants' points of argument.

Regarding Applicants' first point, please see Cornett [*“Preferably [the electronically stored parts manual] contains a complete bill of materials for each machine in each line. The bill of materials is contained in a hierarchial listing, which breaks each machine into assemblies and breaks each assembly into its subassemblies, down to the level of individual parts.”* (column 3, lines 20-33) Cornett assigns codes (explicitly described at column 5, lines 24-46) to elements (individual parts) responsive to the system to which the element belongs (subassembly, assembly, or machine).]

Regarding Applicants' second point, please see Benjamin [*“The second category [of information in the database] is assembly specific tables containing links or relationships to the lookup tables for commonly used data and additional data unique to the particular assembly.”*]

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(column 2, lines 60-65). Benjamin clearly discloses assigning unique data, which in the context of the combination formed in the rejection of claim 45, is a code.]

Regarding Applicants' third point, the previous rejection clearly stated motivation to combine, as in "to produce a labeling method that depicts a higher level of information regarding the component being labeled." Both Benjamin and Cornett are analogous art in the field of tracking components with labeling systems. The particular traditions of the aircraft industry are not relevant to the issue of patentability.

Applicants' arguments have been fully considered but have been found unpersuasive.

Regarding claim 47, Cornett et al. teaches assigning a code having at least three digits in common with digits of a part number for the component (Figure 26, "01B11", "01B13", "01B14", etc.) The combination is the same as that used to reject claim 45.

Regarding claim 48, Cornett et al. teaches assigning a plurality of codes to at least one single element (column 5, lines 24-46). The combination is the same as that used to reject claim 45.

Regarding claim 78, Benjamin discloses using the invention in a system comprising an aircraft [*"Although the embodiment preferred by the inventor is electronic units, the invention is applicable to virtually any type of manufactured goods, particularly where the good is produced with a number of configurations or versions, such as automobiles, computers, airplanes and many other products."* (column 24, lines 14-19)].

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18. Claims 49 is rejected under 35 U.S.C. § 103(a) as being unpatentable over Benjamin in view of Cornett as applied to claim 48 above, and further in view of Jolliffe.

Regarding claim 49, neither Benjamin nor Cornett expressly disclose codes which represent connection ends of the components.

Jolliffe teaches codes which represent connection ends of the components (column 3, lines 1-45).

19. Claim 73 is rejected under 35 U.S.C. § 103(a) as being unpatentable over Jolliffe as applied to claim 72 above and further in view of Cornett.

Regarding claim 73, Jolliffe does not expressly disclose the hierarchy of major elements stored in the data base.

Cornett discloses recording at least three levels of hierarchy for parts in a database [*“Preferably [the electronically stored parts manual] contains a complete bill of materials for each machine in each line. The bill of materials is contained in a hierarchial listing, which breaks each machine into assemblies and breaks each assembly into its subassemblies, down to the level of individual parts.”* (column 3, lines 20-33)].

It would have been obvious to a person of ordinary skill in the art at the time of applicant's invention to combine hierarchical structure as taught by Cornett with the vehicle design index of Jolliffe to produce a vehicle design index that depicts the relationship between components, so as to easily determine the impact of design changes. The combination could be achieved by using the hierarchical structure of Cornett to store the relationships between components within the invention of Jolliffe according to a component's membership in a system.

20. Claim 41 is rejected under 35 U.S.C. § 103(a) as being unpatentable over Jolliffe as applied to claim 72 above, and further in view of Benjamin.

Regarding claim 41, Benjamin teaches running a verification routine on the data contained within the database to find faults in the design represented by the data (column 3, lines 46-62). Benjamin also teaches assigning the components a pre-defined location within the final assembly (column 3, lines 20-45). It would have been obvious to a person of ordinary skill in the art at the time of applicant's invention to combine the verification routines taught by Benjamin with the method of providing information of Jolliffe in order to report data analyses and detect errors. The combination could be achieved by including the verification routines as a step in updating the database.

Regarding 42, Benjamin teaches running a verification routine on the data contained within the database to find faults in the design represented by the data (column 3, lines 46-62). Benjamin also teaches assigning the components a pre-defined location within the final assembly (column 3, lines 20-45). It would have been obvious to a person of ordinary skill in the art at the time of applicant's invention to combine the verification routines taught by Benjamin with the method of providing information of Jolliffe in order to report data analyses and detect errors. The combination could be achieved by including the verification routines as a step in updating the database.

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Conclusion

Art considered pertinent by the examiner but not applied has been cited on form PTO-892.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jason Proctor whose telephone number is (571) 272-3713. The examiner can normally be reached on 8:30 am-4:30 pm M-F.

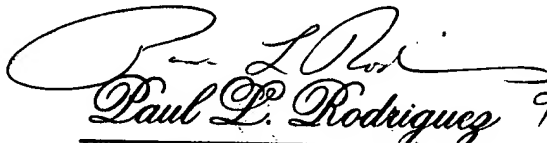
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Leo Picard can be reached at (571) 272-3749. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

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Any inquiry of a general nature or relating to the status of this application should be directed to the TC 2100 Group receptionist: 571-272-2100. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Jason Proctor
Examiner
Art Unit 2123

jsp


Paul L. Rodriguez 9/2/05
Primary Examiner
Art Unit 2125